COOL Zones Develop Children who are COOL CALM CHILL and SAFE: An Integrated Behavioral Health Program in Primary Schools

2019 Annual Conference on Advancing School Mental Health
Austin, TX

Kimberly Blair, PhD & Robert Ryan, MS, LPC

Matilda Theiss Early Childhood Behavioral Health
UPMC Western Psychiatric Hospital
Pittsburgh PA
COOL ZONE: CONCEPT

• Children Overcoming Obstacles and Limits (COOL) Zone is a model of intervention developed through a partnership between Matilda Theiss Early Childhood Behavioral Health and the Pittsburgh Penguin’s Foundation in 2015.

• The COOL Zone is a set of interventions and settings that create a therapeutic framework that engages children and families in comprehensive behavioral health treatments that are family-focused, multiculturally-sensitive, strengths-based and trauma informed.

• The COOL Zone is built above the 4 main tenants of keeping children COOL, CALM, CHILL and SAFE. The overall goal of the COOL Zone is to provide high quality, evidenced-based services to children and their families through non-stigmatizing settings and interventions.

COOL ZONE: GOAL

• The primary goal of the COOL Zone is to provide high quality behavioral health treatment to young children by developing family partnerships, fostering resiliency, providing individualized and targeted skills to children and facilitating access to community resources.

• Destigmatize behavioral health treatment for families through child-friendly environments and programming.

• Address gaps in behavioral health services for young children.
COOL ZONE: Demographics

• The COOL Zone will serve children 3-12 years of age experiencing a range of behavioral and emotional disruptions such as:
  • aggression, anxiety, depression, withdrawal, family disruption, emotional difficulties, traumatic responses, and etc.

• Children admitted to the COOL Zone will be those who are able, with support from the program, to continue to function in their community, family, and school but require comprehensive, multidisciplinary, and individualized intensive treatment for emotional or behavioral difficulties.

Main Features: The Igloo

The Igloo is the designated therapy space in the COOL Zone. In this area, children and clinician’s can hold safe and private sessions based on a child’s treatment needs. The space was designed to be non-threatening and child friendly in order for children to more comfortably engage.
Main Features: Penguins Patches

Penguin’s Patches is an internally developed individualized curriculum program wherein children earn patches for the therapeutic skills they have earned.

COOL ZONE: Supporting Our Colony

Supporting Our Colony is a group reinforcement system to develop accountability and a community of success for clients. Each client has opportunities to earn a penguin egg for group goals including being a Positive Leader, Kind Helper, and Caring Citizen. Once the client group fills the “egg basket,” all clients earn a prize.
Main Features: Check In/Check Out

Each day a COOL Zone Team member will work to establish daily goals, evaluate the client’s overall emotional state and set reinforcement for positive behaviors. These items will be reviewed at the end of each day through our Check-In, Check-Out sheets.

Main Features: Family Kudos

Each week the staff send home Family Kudos for caregivers to review which summarizes a child’s overall goals and successes in regards to the treatment process for the week.
Main Features: Penguins Patches

Evidenced-Based Treatment (EBT) is at the core of all COOL Zone programming, many of which address the significant effects of trauma on children and their families.

Depending on the COOL Zone site EBTs include: Child-Parent Psychotherapy, Incredible Years, Attachment Regulation & Competency, and Trauma-Focused Cognitive Behavioral Therapy.

COOL ZONE: Therapeutic Sessions

• **Individual Therapy Sessions**: Each student receives weekly individual therapy with both Masters and Bachelors level clinicians. They will work with you and the child’s caregivers to develop goals and interventions that best suit the specific needs of the child. Additionally, if needed our Masters clinicians utilize trauma-informed treatments (TF-CBT, CPP) to address any traumatic incidents that occur.

• **Group Therapy Sessions**: Students will be selected at various points in their treatment process to participate in weekly group therapy with peers. The CSBBH team utilizes the Incredible Years Small Group Dina Program, an evidenced-based treatment program for young children.
COOL ZONE: Child Outcomes

- 249 children, 88 with six-month assessment
- Behavior Assessment System for Children – 3rd Edition
  - Parent and Teacher reports
  - Significance Ranges for T-Scores
    - Clinical & Content: >70 Clinically Sig; 60-69 At-Risk
    - Adaptive: <30 Clinically Sig; 31-40 At-Risk
- Clinical Scales
  - Aggression, Anxiety, Attention Problems, Atypicality, Conduct Problems, Depression, Hyperactivity, Somatization, Withdrawal
- Adaptive Scales
  - Activities of Daily Living, Adaptability, Functional Communication, Leadership, Social Skills, Study Skills
- Content Scales
  - Anger Control, Bullying, Developmental Social Disorders, Emotional Self-Control, Executive Functioning, Negative Emotionality, Resiliency
- Parent Relationship Questionnaire
  - Attachment, Involvement, Discipline Practices, Parenting Confidence, Satisfaction with School, Relational Frustration

BASC-3: Clinical Scales (Parent Report)

| Clinical Scale         | Baseline M | Baseline SD | Six Months M | Six Months SD | t-score | Sig.
|------------------------|------------|-------------|--------------|--------------|---------|------
| Aggression             | 71.62      | 17.73       | 66.98        | 18.45        | 2.923   | .004**
| Anxiety                | 54.71      | 11.86       | 52.85        | 12.09        | 0.719   | .473
| Attention Problems     | 64.26      | 8.46        | 62.03        | 9.28         | 2.017   | .047*
| Atypicality            | 62.01      | 15.67       | 60.24        | 14.98        | 0.556   | .579
| Conduct Problems       | 71.43      | 16.69       | 65.05        | 15.74        | 2.497   | .014*
| Depression             | 64.48      | 13.79       | 59.03        | 13.36        | 2.758   | .007**
| Hyperactivity          | 67.33      | 12.77       | 64.73        | 12.52        | 1.668   | .099*
| Somatization           | 50.50      | 11.29       | 49.21        | 11.80        | 0.711   | .479
| Withdrawal             | 56.18      | 10.64       | 54.82        | 10.18        | 0.319   | .750

*** p<.001, ** p<.01, * p<.05, ' p<.10
### BASC-3: Clinical Scales (Teacher Report)

<table>
<thead>
<tr>
<th>Clinical Scales</th>
<th>Baseline M</th>
<th>SD</th>
<th>Six Months M</th>
<th>SD</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td>77.79</td>
<td>19.89</td>
<td>72.17</td>
<td>18.35</td>
<td>1.948</td>
<td>.054*</td>
</tr>
<tr>
<td>Anxiety</td>
<td>56.47</td>
<td>13.07</td>
<td>57.60</td>
<td>11.98</td>
<td>-0.602</td>
<td>.547</td>
</tr>
<tr>
<td>Attention Problems</td>
<td>61.42</td>
<td>8.73</td>
<td>59.85</td>
<td>9.91</td>
<td>1.052</td>
<td>.296</td>
</tr>
<tr>
<td>Atypicality</td>
<td>64.05</td>
<td>16.27</td>
<td>64.75</td>
<td>14.74</td>
<td>-0.301</td>
<td>.764</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>72.22</td>
<td>18.46</td>
<td>67.79</td>
<td>16.13</td>
<td>1.699</td>
<td>.092*</td>
</tr>
<tr>
<td>Depression</td>
<td>67.45</td>
<td>15.74</td>
<td>63.75</td>
<td>16.34</td>
<td>1.477</td>
<td>.144</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>68.04</td>
<td>13.74</td>
<td>65.74</td>
<td>14.45</td>
<td>1.044</td>
<td>.299</td>
</tr>
<tr>
<td>Learning Problems</td>
<td>62.54</td>
<td>12.37</td>
<td>60.42</td>
<td>11.93</td>
<td>1.132</td>
<td>.231</td>
</tr>
<tr>
<td>Somatization</td>
<td>54.00</td>
<td>12.88</td>
<td>53.04</td>
<td>13.54</td>
<td>0.294</td>
<td>.768</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>62.89</td>
<td>11.67</td>
<td>60.72</td>
<td>11.64</td>
<td>1.206</td>
<td>.216</td>
</tr>
</tbody>
</table>

*** p<.001, ** p<.01, *p<.05, +p<.10

### BASC-3: Adaptive Scales (Parent Report)

<table>
<thead>
<tr>
<th>Adaptive Scales</th>
<th>Baseline M</th>
<th>SD</th>
<th>Six Months M</th>
<th>SD</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities of Daily Living</td>
<td>41.38</td>
<td>10.73</td>
<td>40.63</td>
<td>10.23</td>
<td>0.539</td>
<td>.590</td>
</tr>
<tr>
<td>Adaptability</td>
<td>38.20</td>
<td>8.13</td>
<td>40.35</td>
<td>8.14</td>
<td>-1.876</td>
<td>.063*</td>
</tr>
<tr>
<td>Functional Communication</td>
<td>42.58</td>
<td>8.71</td>
<td>43.36</td>
<td>8.75</td>
<td>-0.484</td>
<td>.629</td>
</tr>
<tr>
<td>Leadership</td>
<td>43.03</td>
<td>7.87</td>
<td>44.97</td>
<td>8.55</td>
<td>-0.723</td>
<td>.471</td>
</tr>
<tr>
<td>Social Skills</td>
<td>42.18</td>
<td>8.92</td>
<td>43.66</td>
<td>9.93</td>
<td>-0.626</td>
<td>.532</td>
</tr>
</tbody>
</table>

*** p<.001, ** p<.01, *p<.05, +p<.10
### BASC-3: Adaptive Scales (Teacher Report)

<table>
<thead>
<tr>
<th>Adaptive Scale</th>
<th>Baseline</th>
<th></th>
<th>Six Months</th>
<th></th>
<th>t-</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability</td>
<td>33.38</td>
<td>9.64</td>
<td>36.08</td>
<td>10.11</td>
<td>-1.742</td>
<td>.085+</td>
</tr>
<tr>
<td>Functional Communication</td>
<td>39.93</td>
<td>8.55</td>
<td>41.02</td>
<td>9.28</td>
<td>-0.775</td>
<td>.440</td>
</tr>
<tr>
<td>Leadership</td>
<td>38.50</td>
<td>7.11</td>
<td>40.62</td>
<td>8.23</td>
<td>-1.699</td>
<td>.093+</td>
</tr>
<tr>
<td>Social Skills</td>
<td>38.99</td>
<td>8.62</td>
<td>41.79</td>
<td>10.40</td>
<td>-1.808</td>
<td>.074+</td>
</tr>
<tr>
<td>Study Skills</td>
<td>37.14</td>
<td>8.85</td>
<td>38.55</td>
<td>10.02</td>
<td>-0.919</td>
<td>.360</td>
</tr>
</tbody>
</table>

*** p<.001, ** p<.01, *p<.05, +p<.10

### BASC-3: Content Scales (Parent Report)

<table>
<thead>
<tr>
<th>Content Scale</th>
<th>Baseline</th>
<th></th>
<th>Six Months</th>
<th></th>
<th>t-</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger Control</td>
<td>68.15</td>
<td>12.71</td>
<td>63.04</td>
<td>13.12</td>
<td>3.808</td>
<td>.000***</td>
</tr>
<tr>
<td>Bullying</td>
<td>68.69</td>
<td>18.45</td>
<td>64.44</td>
<td>19.43</td>
<td>2.751</td>
<td>.007**</td>
</tr>
<tr>
<td>Developmental Social Disorders</td>
<td>62.53</td>
<td>9.77</td>
<td>61.47</td>
<td>10.24</td>
<td>0.391</td>
<td>.696</td>
</tr>
<tr>
<td>Emotional Self-Control</td>
<td>64.45</td>
<td>11.79</td>
<td>59.66</td>
<td>11.27</td>
<td>3.133</td>
<td>.002**</td>
</tr>
<tr>
<td>Executive Functioning</td>
<td>65.63</td>
<td>9.57</td>
<td>62.19</td>
<td>9.23</td>
<td>3.513</td>
<td>.000***</td>
</tr>
<tr>
<td>Negative Emotionality</td>
<td>64.29</td>
<td>12.69</td>
<td>58.67</td>
<td>12.02</td>
<td>3.176</td>
<td>.002**</td>
</tr>
<tr>
<td>Resiliency</td>
<td>39.97</td>
<td>6.96</td>
<td>42.06</td>
<td>7.03</td>
<td>-2.388</td>
<td>.019*</td>
</tr>
</tbody>
</table>

*** p<.001, ** p<.01, *p<.05
BASC-3: Content Scales (Teacher Report)

<table>
<thead>
<tr>
<th>Content Scale</th>
<th>Baseline M</th>
<th>Baseline SD</th>
<th>Six Months M</th>
<th>Six Months SD</th>
<th>t-</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger Control</td>
<td>76.19</td>
<td>17.40</td>
<td>70.47</td>
<td>15.99</td>
<td>2.275</td>
<td>.025*</td>
</tr>
<tr>
<td>Bullying</td>
<td>74.40</td>
<td>20.92</td>
<td>68.21</td>
<td>19.51</td>
<td>2.025</td>
<td>.045*</td>
</tr>
<tr>
<td>Developmental Social Disorders</td>
<td>64.95</td>
<td>10.31</td>
<td>63.85</td>
<td>10.46</td>
<td>0.681</td>
<td>.497</td>
</tr>
<tr>
<td>Emotional Self-Control</td>
<td>70.72</td>
<td>13.99</td>
<td>65.92</td>
<td>13.44</td>
<td>2.293</td>
<td>.024*</td>
</tr>
<tr>
<td>Executive Functioning</td>
<td>69.02</td>
<td>10.72</td>
<td>65.38</td>
<td>10.80</td>
<td>2.188</td>
<td>.031*</td>
</tr>
<tr>
<td>Negative Emotionality</td>
<td>70.10</td>
<td>14.57</td>
<td>65.72</td>
<td>14.28</td>
<td>1.981</td>
<td>.050*</td>
</tr>
<tr>
<td>Resiliency</td>
<td>34.97</td>
<td>7.67</td>
<td>38.23</td>
<td>8.64</td>
<td>-2.497</td>
<td>.014*</td>
</tr>
</tbody>
</table>

*** p<.001, ** p<.01, *p<.05

Outcomes Summary

• At six months, parents report clinically significant improvement in symptoms related to aggression, attention problems, conduct problems, and depression

• At six months, teachers report clinically significant reduction of learning problems. Noted improvements in aggression and conduct problems

• At six months, parents and teachers report clinically significant improvements in maladaptive behaviors associated with anger control, bullying, emotional self-control, and negative emotionality

• At six months, parents and teachers both report significantly increased resiliency
COOL ZONE: Family Feedback

- The most helpful part of this program has been being able to help get my family furniture.
- We just have more support so that more kids can get the services they need to make it a better classroom, a happier classroom and a safer classroom.
- I am happy I don’t get calls from the school anymore.
- The flexibility and advice. Also, the one on one help with my child in and outside of school.
- The help and the resources provided to our family.
- The home sessions are helpful including talking to each other, learning how to ask my child to do something instead of telling him, playing games together and taking turns.
- Coming to son’s med appointment and being available to talk when I need to.
- Working with my son and getting him authorized for your service.
- Happy with the support to get our lives in order and help me seek services for myself and family.
- Helping my children and taking a load off of my mind as one less problem I have.

COOL ZONE: Hosanna House Community Program

- In September 2018, the COOL Zone Hosanna House Early Childhood Intensive Outpatient Program (IOP) was launched between a collaboration from the Pittsburgh Penguins Foundation and Staunton Farms Foundation.
- The COOL Zone Hosanna House Intensive Outpatient Program (IOP) works with children between 3-8 with short-term (9-10 weeks) intensive behavioral health group programming; individual and family therapies; as well as care coordination between providers and child’s early learning center or school.
- The COOL Zone runs groups for preschool-aged children (3-5), 3-days a week as well as after school groups for school-aged children (5-8), 4-days a week for approximately 9-10 weeks throughout the year.
COOL ZONE: Hosanna House Program Outcomes

- The participants in the project include 16 females, 29 males, and one transgendered male, for a total of 46 clients
- Negative behaviors have dropped and positive behaviors have increased (Functional Communication was the only domain with essentially flat scores)
- Significant improvements at the beginning and end of treatment (9-10 weeks) in maladaptive behaviors associated with hyperactivity, aggression, and depression

COOL ZONE: Locations

- **Edgewood Primary School**  
  241 Maple Ave. Pittsburgh, PA 15218
- **Wilkins Primary School**  
  362 Churchill Rd. Pittsburgh, PA 15235
- **Twin Rivers Primary/Intermediate School**  
  1600 Cornell St. McKeesport, PA 15132
- **Penn Hills Elementary School**  
  1079 Jefferson Rd. Pittsburgh, PA 15235
- **Hosanna House Early Childhood Intensive Outpatient Program (IOP)**  
  807 Wallace Ave. Wilkinsburg, PA 15221